MMDA Discussion

Should NASA specify JTRS/SCA approach?

- Civil Aviation waveforms do not have a security restriction.
- How do we certify JTRS for use on civilian aircraft?
- Compare JTRS documentation against DO-178B requirements and produce a gap analysis.
- Compare a JTRS approach vs an IMA approach from a civil certification perspective.
- We would need cluster 4 AMF version of JTRS. Study not available for 18 MAC. Talk to Col. McLeard in JPO and Lt. Col. Watson at Hanscom AFB.
- JTRS airworthiness plan uses existing data to with FAA Aircraft Cert. and Flight Standards to determine risk reduction activities.
- Is there a cost or performance penalty in using JTRS architecture?
- Firmware vs SW performance issues for selected waveforms?



MMDA Discussion

Minimum supporting certification data?

- Do we need a full data set? Certain common data sets are required. Some parts for multimode, some parts are multifunction.
- To begin certification process need functional decomposition & FMEA (common mode, fault tree, etc.) – Discuss roadmap with FAA
- Everything except (up to) DO-160
- Can we use commonality?
- Drive out the system level requirements FAR25.1309, AC25.1309
- Review RTCA DO-248B, industry response to software certification
- Can we use a Spiral Development process?
- Decide whether MMDA is aircraft specific or not.
- Vendors would want a certification plan that bounds MMDA.



MMDA Discussions

Candidate C,N and S functionality?

- Concept of operations needed for MMDA
- Define base line radio suite transport aircraft.
- Start with minimum functionality
- Consult NAS Architecture V5 for functionality
- Ease of future requirements upgrades

Other Feedback, Suggestions

- Clarify success criteria for research project
- Look at Security Certification issues IAW AEEC and FAA processes and Homeland Security Presidential Directive #7 on Critical Infrastructure Protection.
- Look at SASIF.

